specific topic.

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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

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http://www.cas.org/ONLINE/UG/regprops.html

=>

Uploading C:\Program Files\Stnexp\Queries\10525264.str

טםט אזוטניזיטטט

chain nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

1-2 1-10 2-3 3-4 4-5 4-6 6-7 7-8 8-9

exact/norm bonds :

1-2 1-10 2-3 4-5 4-6 6-7 8-9

exact bonds :

3-4 7-8

G1:Cb,Cy,Hy

Match level:

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1

STR

G1 Cb, Cy, Hy

Structure attributes must be viewed using STN Express query preparation.

=> s 11 full

FULL SEARCH INITIATED 15:42:18 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4156 TO ITERATE

100 00 DD000000D 4150 TMDD3MT0310

Karen Cheng

SEARCH TIME: 00.00.01

L2 273 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

FULL ESTIMATED COST ENTRY SESSION 172.10 172.31

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FILE COVERS 1907 - 29 Jan 2007 VOL 146 ISS 6 FILE LAST UPDATED: 28 Jan 2007 (20070128/ED)

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http://www.cas.org/infopolicy.html

=> s 12

L3

5 L2

=> d ibib abs hitstr tot

L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:220304 CAPLUS DOCUMENT NUMBER: 140:270877
TITLE: Preparation - 5

Preparation of heterocyclic-substituted amides as Preparation of heterocyclic-substituted amides as cathepsin cysteine protease inhibitors
Boyd, Michaels Gagnon, Maccs Lau, Cheuks Mellon, Christophes Scheigetz, John Merck Prosst Canada & Co., Can.
PCT Int. Appl., 118 pp.
CODEN: PIXXD2
Patent

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: English

LANGUAGE FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2004022526 A1 20040318 W0 2003-CA1346 20030903
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, II, IN, IS, DF, KE, KG, KR, KZ, LC, LK, LR, LL, LLT, LU, LV, MA, MD, MG, MK, NN, MW, MX, MZ, NI, NO, NZ, CM, PG, PH, PL, PT, RO, RW, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, TA, EE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, BG, GR, NU, IE, IT, UM, MC, NL, PT, RO, SE, SI, SK, TE, ST, ST, TR, BB, BJ, CF, CG, CI, CH, GA, GM, GQ, GW, ML, MR, NE, SN, TD, TG
CA 2495939 A1 20040318 CA 2003-2495939 20030903
AU 2003266052 A1 20040318 CA 2003-266052 20030903
AU 201326052 A1 20050508 EP 2003-793540 20030903
AR AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FY, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
US 200537326 T 20051208 US 2002-408064P P 20020904

OTHER SOURCE(S): MARPAT 140:270877 OTHER SOURCE(S): MARPAT 140:270877

L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Absolute stereochemistry.

672328-15-3 CAPLUS Pentanamide, 2-[(R)-(4-bromophenyl)[4-(methylsulfonyl)phenyl]methoxy]-N-(cyanomethyl)-4-methyl-, (25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

672328-19-7 CAPLUS
Pentanamide, 2-[(R)-(4-bromophenyl)(4-chlorophenyl)methoxy]-N-(cyanomethyl)-4-methyl-, (25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

672329-22-2 CAPLUS

Karen Cheng

ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

$$R^{9} \underbrace{\begin{array}{c} R^{8} & R^{7} & R^{4} \\ D \end{array} \begin{array}{c} R^{9} & R^{7} & R^{4} \\ \end{array} \begin{array}{c} R^{3} & H \\ O & R^{2} & R^{1} \\ \end{array} \begin{array}{c} CN \\ I & I \end{array}$$

Title compds. I [R1-4 = H, alkyl, alkenyl,etc.; X = O, S, 502, alkyl; R7-8 = H, alk(en/yn)ly, haloalkyl, alkoxy, NO2, CN, etc.; D = (hetero)aryl, cycloalkyl, etc.; R9 = H, OH, CN, alkyl, etc.; n = 0-3] are prepared For instance, (55)-2-(4-bromophenyl)-5-isobutyl-1, 3-dioxolan-4-one (preparation given) is reacted with PhMgBr (Et20, 2nC12, -40°) and the resulting carboxylic acid coupled to aminoacetonitrile (DMF, HATU, Et3N) to give II. I are cysteine protease inhibitors, including but not limited to, inhibitors of cathepsins K, L, S and B and are useful for treating diseases in which inhibition of bone resorption is indicated, such as osteoprosis. They have the following structure: Formula (I). 672328-08-49 672328-15-3P 672328-19-7P
672328-22-2P 672328-25-5P, (25)-2-[[(1R)-1-(4-BED)]-4-methyl)-4-methyl-entanamide 672328-55-8P, N-(Cyanomethyl)-4-methyl-2-([chenyl]-2-(4-chorophenyl)-2-(4-(chorophenyl)-2-(4-bromophenyl)-2-(3-chorophenyl)-2-(3-chorophenyl)-3-(4-bromophenyl)-3-(3-chorophenyl)-3-(4-bromophenyl)-3-(3-chorophenyl)-3-(4-bromophenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(2-trifucorothoxyl)-N-(cyanomethyl)-4-methyl-2-(phenyl)-4-methyl-2-(2-trifucorothoxyl)-N-(cyanomethyl)-4-methyl-2-(phenyl)-4-methyl-2-(2-trifucorothoxyl)-8-(Cyanomethyl)-4-methyl-2-(phenyl)-4-methyl-2-(2-trifucorothoxyl)-8-(Cyanomethyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-2-(phenyl)-4-methyl-4-methyl-2-(phenyl)-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-methyl-4-

ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

672328-25-5 CAPLUS
Pentanamide, 2-[(1R)-1-[4-bromophenyl)-2-[4-chlorophenyl]ethoxy]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

672328-52-8 CAPLUS
Pentanamide, N-(cyanomethyl)-4-methyl-2-[phenyl[4-(1-piperazinylcarbonyl)phenyl]methoxy]- (9CI) (CA INDEX NAME)

672328-55-1 CAPLUS Pentanamide, 2-[(3)-(4-bromophenyl)-2-thienylmethoxy]-N-(cyanomethyl)-4-methyl-, (25)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

INVENTOR (S):

143:97209
Synthesis of epothilones for use in pharmaceutical compositions as antitumor agents
Danishefsky, Samuel J.; Rivkin, Alexey; Yoshimura, Fumihiko; Chou, Ting-Chao; Gabarda, Ana E.; Dong, Huajin; Wu, Kaida; Moore, Malcolm A. S.; Dorn, David USA PATENT ASSIGNEE(S): SOURCE:

USA V.S. Pat. Appl. Publ., 274 pp., Cont.-in-part of U.S. Ser. No. 435,408.
CODEN: USXXCO
Patent
English 3

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005143429	A1	20050630	US 2004-921109	20040818
US 2004053995	A1	20040318	US 2003-402004	20030328
US 6921769	B2	20050726		
US 2004053910	A1	20040318	US 2003-435408	20030509
AU 2005218308	A1	20050915	AU 2005-218308	20050228
CA 2556692	A1	20050915	CA 2005-2556692	20050228
WO 2005084222	A2	20050915	WO 2005-US6051	20050228
WO 2005084222	A3	20051124		
W: AE, AG, A	L, AM, A1	r, AU, AZ,	BA, BB, BG, BR, BW, BY, E	BZ, CA, CH,
CN, CO, C	R, CU, C	Z, DE, DK,	DM, DZ, EC, EE, EG, ES, I	FI, GB, GD,
GE GH G	M. HR. HI	I ID II.	IN. IS. JP. KE. KG. KP. I	CR. KZ. LC.

ZW UG, CY, MC, GN, ZM, CZ, NL, GQ, ZW, DE, PL, GW,

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
MR, NE, SN, TD, TG
EP 1722791
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI,
US 2002-405823P PRIORITY APPLN. INFO :

US 2002-408589P US 2002-423129P P 20021101 US 2003-456159P US 2003-435408 A2 20030509

US 2003-496741P P 20030821

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

(claimed compd.; synthesis of epothilone derivs. for use in
pharmaceutical compns. as antitumor agents)

RN 856240-85-2 CAPLUS

CN 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione,
10.14-dihydroxy-11,11,13,15tetramethyl-6-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-3(trifluoromethyl)-, (1R,3E,6S,10S,13R,14S,15S,16S)- [9CI) (CA INDEX
NAME)

RN 856240-86-3 CAPLUS
CN 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione,
10,14-dihydroxy-11,11,13,15tetramethy1-6-(118)-1-methy1-2-(2-methy1-4-thiazoly1)etheny1]-3(trifluoromethy1)-, (1s,3E,6S,10S,13R,14S,15S,16R)- (9CI) (CA INDEX

RN CN 856240-87-4 CAPLUS 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-3,11,11,13,15-pentamethyl-6-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1R,3z,6s,10s,13R,14s,15s,16s)- (9CI) (CA INDEX

Karen Cheng

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
US 2004-548402P P 20 20040227

> US 2004-921109 A 20040818

WO 2005-US6051 W 20050228

OTHER SOURCE(S):

MARPAT 143:97209

Epothilone analogs, such as I [-A-B-, -C-D- = -C.tplbond.C-, -C-R(R)CH(R1)-, -C(R):C(R1)-; R, R1 = H, alkyl, halogen, alkoxy, acyl, etc.; -A-B- = fused oxirane ring; -C-D- = fused cyclopropane or fused aziridine ring; R2 = aryl, heteroaryl, arylalkyl, heteroarylalkyl] are prepared as antitumor agents. The present invention also provides pharmaceutical compns. comprising compds. of formula I and provides methods of treating cancer comprising administering a compound of

methods of treating cancer comprising administering a compound of ula I.

Thus, II was prepared via an intramol. methathesis macrocyclization synthetic sequence and showed good cell growth inhibition against various drug-resistant tumors.

85c240-85-2P 85c240-86-3P 85c240-87-4P
85c240-89-6P 85c240-91-0P 85c240-92-1P
85c240-93-2P 85c240-97-6P 85c240-95-4P
85c240-99-8P 85c240-97-6P 85c240-98-PP
85c240-99-8P 85c241-00-4P 85c241-01-5P
85c241-02-6P 85c241-03-7P 85c241-01-5P
85c241-05-9P 85c241-06-0P 85c241-07-1P
85c241-06-2P 85c241-11-06-P 85c241-11-PP
85c451-50-6P 85c53-57-1P 85c453-58-8P
85c451-56-0P 85c53-57-1P 85c453-58-2P
85c453-50-8 85c453-57-1P 85c453-58-2P
85c453-62-8P 85c453-60-6P 85c453-67-3P
RL: SPN (Synthetic preparation): THU (Therapeutic use); BIOL (Biological

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

856240-89-6 CAPLUS
7-0xabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-3,11,11,13,15-pentamethyl-6-{(1E)-1-methyl-2-{2-methyl-4-thiazolyl}ethenyl]-, (1S,3Z,6S,10S,13R,14S,15S,16R)- (9CI) (CA INDEX

856240-91-0 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-

12,12,14,16-tetramethyl-7-{(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-3-(trifluoromethyl)-, (1R,3R,5S,7S,1lS,14R,15S,16S,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856240-92-1 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-

12,12,14,16-tetramethyl-7-{(1E)-1-methyl-2-{2-methyl-4-thiazolyl}ethenyl}3-(trifluoromethyl)-, (1S,3R,5S,7S,11S,14R,15S,16S,17R)- (9CI) (CA INDEX

Absolute stereochemistry. Double bond geometry as shown.

856240-93-2 CAPLUS
4,8-Dioxatricyclo(15.1.0.03,5)octadecane-9,13-dione, 11,15-dihydroxy3,12,12,14,16-pentamethyl-7-{(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl}-, (1R,3R,5S,7S,1lS,14R,15S,16S,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856240-96-5 CAPLUS 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-6-[(1E)-2-

[2-(hydroxymethyl)-4-thiazolyl]-1-methylethenyl)-11,11,13,15-tetramethyl-3-(trifluoromethyl)-, (1S,3E,6S,10S,13R,14S,15S,16R)- (9CI) (CA INDEX NAME)

856240-97-6 CAPLUS
4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-7[(1E)-2-12-(hydroxymethyl)-4-thiazolyl]-1-methylethenyl]-12,12,14,16tetramethyl-3-(trifluoromethyl)-, (1R,3R,5S,7S,11S,14R,15S,16S,17S)-

(CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856240-94-3 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-3,12,12,14,16-pentamethyl-7-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3R,5S,7S,11S,14R,15S,16S,17R)- (9CI) (CA INDEX

Absolute stereochemistry.
Double bond geometry as shown.

856240-95-4 CAPLUS 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-6-[(1E)-2-

[2-(hydroxymethyl)-4-thiazolyl]-1-methylethenyl]-11,11,13,15-tetramethyl-3-(trifluoromethyl)-, (1R,3E,6S,10S,13R,14S,15S,16S)- (9CI) (CA INDEX NAME)

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856240-98-7 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-7-[(1E)-2-[2-(hydroxymethyl)-4-thiazolyl]-1-methylethenyl]-12,12,14,16-tetramethyl-3-(trifluoromethyl)-, (1S,3R,5S,7S,11S,14R,15S,16S,17R)-

· (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

856240-99-8 CAPLUS
7-0xabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-3,11,11,3,15-pentamethyl-6-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (3Z,6S,10S,13R,14S,15S)- (9CI) (CA INDEX NAME)

10921109

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856241-00-4 CAPLUS 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-

3,11,11,13,15-pentamethyl-6-[(1E)-1-methyl-2-(2-methyl-4-oxazolyl)ethenyl]-, (32,68,108,138,148,158)- (9CI) (CA INDEX NAME)

856241-01-5 CAPLUS 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-6-[(1E)-2-

[2-(hydroxymethy1)-4-thiazoly1]-1-methyletheny1]-3,11,11,13,15-pentamethyl-, (3Z,6S,10S,13R,14S,15S)- (9CI) (CA INDEX NAME)

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856241-04-8 CAPLUS 7-0xabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-3,11,11,13,15-pentamethyl-6-[(1E)-1-methyl-2-(2-methyl-5-benzoxazolyl)ethenyl]-, (3Z,6S,10S,13R,14S,15S)- (9CI) (CA INDEX NAME)

RN 856241-05-9 CAPLUS
CN 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione,
10,14-dihydroxy-11,11,13,15tetramethyl-6-[(18]-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-3(trifluoromethyl)-, (3E,6S,10S,13R,14S,15S)- (9CI) (CA INDEX NAME)

RN 856241-06-0 CAPLUS

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L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856241-02-6 CAPLUS 7-Oxabicyclo(14.1.0)heptadec-3-ene-8,12-dione, 10,14-dihydroxy-6-[(1E)-2-

[2-(hydroxymethyl)-4-oxazolyl]-1-methylethenyl]-3,11,11,13,15-pentamethyl-, (3z,6s,10s,13x,14s,15s)- (9CI) (CA INDEX NAME)

856241-03-7 CAPLUS 7-0xabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-3,11,11,13,15-pentamethyl-6-{(1E)-1-methyl-2-(2-methyl-5-benzothiazolyl)ethenyl}-, (3Z,6S,10S,13R,14S,15S)- (9CI) (CA INDEX NAME)

L9 ANSMER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 7-Oxabicyclo(14.1.0)heptadec-3-ene-8,12-dione,
10,14-dihydroxy-11,11,13,15tetramethyl-6-(16)-1-methyl-2-(2-methyl-4-oxazolyl)ethenyl)-3(trifluoromethyl}-, (3E,6S,10S,13R,14S,15S)- (9CI) (CA INDEX NAME)

RN 856241-07-1 CAPLUS
CN 7-0xabicyclo[14.1.0]heptadec-3-ene-8,12-dione,
6-[(1E)-2-[2-(aminomethyl)4-thiazolyl)-1-methylethenyl]-10,14-dihydroxy-3,11,11,13,15-pentamethyl-,
(3Z,6S,10S,13R,14S,15S)- (9CI) (CA INDEX NAME)

RN 856241-08-2 CAPLUS
CN 7-0xabicyclo[14.1.0]heptadec-3-ene-8,12-dione,
6-[(1E)-2-[2-(aminomethyl)4-oxazolyl)-1-methylethenyl]-10,14-dihydroxy-3,11,11,13,15-pentamethyl-,
(32,6s,103,13R,14S,15S)- (9CI) (CA INDEX NAME)

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856241-10-6 CAPLUS 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-6-[(1E)-2-

[2-(hydroxymethy1)-4-thiazoly1)-1-methyletheny1]-11,11,13,15-tetramethyl-3-(trifluoromethyl)-, (3E,6S,10S,13R,14S,15S)- (9CI) (CA INDEX NAME)

сн2-он

856241-11-7 CAPLUS 7-Oxabicyclo[14.1.0]heptadec-3-ene-8,12-dione, 10,14-dihydroxy-6-{(1E)-2-

[2-(hydroxymethy1)-4-oxazoly1]-1-methyletheny1]-11,11,13,15-tetramethyl-3-(trifluoromethy1)-, (3E,6S,10S,13R,14S,15S)- (9CI) (CA INDEX NAME)

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

856453-54-8 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-7-[(1E)-2-[2-(hydroxymethyl)-4-thiazolyl]-1-methylethenyl]-3,12,12,14,16-pentamethyl-, (78,118,14R,158,168)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

856453-56-0 CAPLUS
4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-7[(1E]-2-[2-(hydroxymethyl)-4-oxazolyl]-1-methylethenyl]-3,12,12,14,16pentamethyl-, (75,115,14R,155,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856453-50-4 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-3,12,12,14,16-pentamethyl-7-{(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (7S,11S,14R,15S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

856453-52-6 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-

3,12,12,14,16-pentamethyl-7-[(1E)-1-methyl-2-(2-methyl-4-oxazolyl)ethenyl], (7S,11S,14R,15S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856453-57-1 CAPLUS
4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-3,12,12,14,16-pentamethyl-7-[(1E)-1-methyl-2-(2-methyl-5-benzothiazolyl)ethenyl]-, (7S,11S,14R,15S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

856453-58-2 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-3,12,12,14,16-pentamethyl-7-{(1E)-1-methyl-2-(2-methyl-5-benzoxazolyl)ethenyl}-, (7S,11S,14R,15S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856453-59-3 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-

12,12,14,16-tetramethy1-7-[(1E)-1-methy1-2-(2-methy1-4-thiazoly1)etheny1]-3-(trifluoromethy1)-, (7S,11S,14R,15S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

856453-60-6 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-

12,12,14,16-tetramethyl-7-[(1E)-1-methyl-2-(2-methyl-4-oxazolyl)ethenyl]-3-(trifluoromethyl)-, (7s,11s,14k,15s,16s)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856453-65-1 CAPLUS
4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-7[(1E)-2-[2-(hydroxymethy1)-4-thiazoly1]-1-methyletheny1]-12,12,14,16tetramethyl-3-(trifluoromethy1)-, (7S,113,14R,15S,16S)- (9CI) (CA INDEX

Absolute stereochemistry. Double bond geometry as shown.

856453-67-3 CAPLUS 4,9-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 11,15-dihydroxy-7-[(1E)-2-[2-(hydroxymethyl)-4-oxazolyl]-1-methylethenyl]-12,12,14,16-tetramethyl-3-(trifluoromethyl)-, (7S,11S,14R,15S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

856453-61-7 CAPLUS 4,8-Dioxatricyclo[15.1.0.03,5]octadecane-9,13-dione, 7-[(1E)-2-[2+

(aminomethyl)-4-thiazolyl]-1-methylethenyl]-11,15-dihydroxy-3,12,12,14,16-pentamethyl-, (7s,11s,14R,15s,16s)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

856453-62-8 CAPLUS

Absolute stereochemistry.
Double bond geometry as shown.

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS On STN
ACCESSION NUMBER: 2002:964345 CAPLUS
DOCUMENT NUMBER: 138:24952.
TITLE: Preparation of novel amino nitriles useful as reversible inhibitors of cysteine proteases
Hickey, Eugene R.; Bekkall; Younes; Patel, Usha R.; Spero, Denice M.; Thomson, David S.; Young, Erick R. R. Boehringer Ingelheim Pharmaceuticals, Inc., USA PCT Int. Appl., 223 pp. CODEN: PIXXO2 PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English

PATENT NO.																	
	WO 2002100849									WO 2		20020605					
WO	2002	1008	49		A3		2003	1016									
	W:	AE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR.	BY.	BZ.	CA.	CH.	CN.
							DK,										
							IN,										
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO.	NZ.	OM.	PH.
							SE,										
							ZA,										
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	ΚZ,	MD,	RU,	ŦJ,	TM,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR.	GB,
		GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM.	GA,
		GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
US	2003	1198	27		A1		2003	0626	1	US 21	002-	1630	15		2	0020	604
บร	6982	263			B2		2006	0103									
CA	2449	192			A1		2002	1219		CA 2	002-	2449	192		2	0020	605
EP	1399	431			A2		2004	0324		EP 2	002~	7418	25		2	0020	605
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC.	PT.
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	ŤR						
JP	2005	5010	17		T		2005	0113		JP 2	003-	5036	17		2	0020	605
PRIORIT										US 21							
									1	WO 21	002-	US17	590	1	2	0020	605

R SOURCE(S): MARPAT 138:24952

Novel nitrile compds. YCOGZCR2R3C(:X)NRGCRARSCN [Y = R1, R10, R15, R12N, R13C, where R1 = H, (un)substituted (cyclo)alkyl, aryl. benzyl, tetrahydronaphthyl, indenyl, indanyl, alkylsulfonylalkyl, cycloalkylsulfonylalkyl, arylsulfonylalkyl, arylsulfonylsulfonylsonsyll, as or chappin K, S, F, L and B for the pharmaceutically-acceptable deriva. Were prepared as reversible inhibitors of cysteine proteases such as osteoprocsis, rheumatoid arthritis, multiple selerosis, asthma and other autoimmune diseases, Alzheimer's disease, and atherosclerosis. Thus, morpholine-4-carboxylic acid 1-[[(benzylownethyl]cysnomethyl]co-benzyl L-serine, Z-Hydroxylosospoto acid, and 4-morpholinecarbonyl chloride. 478279-49-17 478279-54-87 478280-11-47 OTHER SOURCE(S): MARPAT 138:24952

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) chlorophenyl)methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl ester (9C1) (CA INDEX NAME)

478280-12-5 CAPLUS 2(1H)-13oquinolinecarboxylic acid, 3,4-dihydro-, 1-[[[1-cyano-2-[(4-methoxyphenyl)methoxy]ethyl]amino]carbonyl]-3-methylbutyl ester (9CI) (CA INDEX NAME)

478280-13-6 CAPLUS 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-methylbutyl ester (9CI) (CA INDEX NAME)

Chralken or subst. NH- CH2-O-CH2-Ph

478280-22-7 CAPLUS
1-Piperazinecarboxylic acid, 4-phenyl-, 2-[(1-cyano-1-methylethyl)amino]-2-oxo-1-phenylethyl ester (9CI) (CA INDEX NAME)

5-14-pyridinyll - 2-111 cyano-3-

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
478280-23-8P 478280-24-9P 478280-30-7P
478280-34-1P 478280-36-3P 478280-31-4P
478280-52-3P 478280-36-3P 478280-54-5P
478280-55-6P 478280-55-4P 478280-57-8P
478280-58-9P 478281-00-4P 478281-03-7P
478281-06-0P 478281-100-4P 478281-12-8P
478281-15-1P 478281-18-4P 478281-11-9P
478281-15-3P 478281-22-6P 478281-21-1P
478281-35-3P 478281-34-6P 478281-31-1P
478281-35-3P 478281-46-8P 478281-49-1P
478281-35-4P 478281-66-4P 478281-67-3P
478281-57-1P 478281-61-40-P 478281-67-3P
478281-70-8P 478281-73-1P 478281-67-3P
478281-70-1P 478281-73-1P 478281-67-3P
478281-19-1P 478281-73-1P 478281-67-3P
478281-19-1P 478281-19-2P 478281-67-3P
478281-19-1P 478281-99-9P 478281-90-2P
478281-19-1P 478281-19-2P 478281-90-2P
478281-19-1P 478281-19-2P 478281-90-2P
478281-19-1P 478281-19-2P 478281-93-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(USes) (Uses)
(prepn. of novel amino nitriles as reversible inhibitors of cysteine proteases)
478279-49-1 CAPLUS
4-Morpholinecarboxylic acid, (1\$)-1-[[[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-methylbutyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

478279-54-8 CAPLUS 4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]car bonyl]-3-methylbutyl ester (9CI) (CA INDEX NAME)

478280-11-4 CAPLUS 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-, 1-[[[2-[(2-[-2-1])]]]) $(-1)^{-1}$

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

478280-24-9 CAPLUS
1-Piperidinecarboxylic acid, 4-[[4-[[1-[[(1-cyano-2-phenylethyl) amino]carbonyl]propoxy]carbonyl]-2-thiazolyl]amino]-, ethylester (9CI) (CA INDEX NAME)

478280-30-7 CAPLUS
4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1-(cyclopropylmethyl)-2-oxocthyl ester (9CI) (CA INDEX NAME)

478280-34-1 CAPLUS
2-Naphthalenecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-methylbutyl ester (9CI) (CA INDEX NAME)

(phenylmethoxy)ethyl]amino]-1-(cyclopropylmethyl)-2-oxoethyl ester (9C1)(CA INDEX NAME)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

2-Naphthalenecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1-(cyclopropylmethyl)-2-oxpethyl ester (9CI) (CA INDEX NAME)

478280-52-3 CAPLUS
Benzo[b]thiophene-2-carboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino[carbonyl]-3-methylbutyl ester (9CI) (CA INDEX NAME)

478280-53-4 CAPLUS
2-Benzofurancarboxylic acid, 5-[2-[4-morpholiny1]ethoxy]-,
1-[[[1-cyano-2-(phenylmethoxy)ethy1]amino]carbony1]-3-methylbuty1 ester
(SCI) (CA INDEX NAME)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS OR STN (Continued)

478280-58-9 CAPLUS 2(1H)-Loquinolinecarboxylic acid, 3,4-dihydro-, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3,3,3-trifluoropropyl ester (9CI) (CA INDEX NAME)

478281-00-4 CAPLUS
4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-4,4-dimethylpentylester (9CI) (CA INDEX NAME)

478281-03-7 CAPLUS

4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-4-methylpentyl ester (9CI) (CA INDEX NAME)

RN 478281-06-0 CAPLUS
CN 4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethy1]amino]car

Karen Cheng

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
2-Benzofurancarboxylic acid, 1-4[[1-cyano-2-(phenylmethoxy)ethyl]amino]car
bonyl}-3-methylbutyl ester [961) (CA INDEX NAME)

478280-55-6 CAPLUS
2-Benzofurancarboxylic acid, 3-methyl-, 1-{{[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl}-3-methylbutyl ester (9CI) (CA INDEX NAME)

478280-56-7 CAPLUS 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-, 1-[[[2-[(3-carboxypheny])methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl ester (9CI) (CA INDEX NAME)

478280-57-8 CAPLUS
2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3,3-difluoropropyl ester (9CI) (CA INDEX NAME)

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) bonyl]-3,3,4,4-tetramerhylpentyl ester (9CI) (CA INDEX NAME)

478281-09-3 CAPLUS
4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3,3-dimethylpantyl ester (9CI) (CA INDEX NAME)

478281-12-8 CAPLUS 4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-{phenylmethoxy}ethyl]amino]carbonyl]-3,3,4-tptmethylpentyl ester (9CI) (CA INDEX NAME)

478281-15-1 CAPLUS
4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl-3-cyclohexyl-3-methylbutyl ester (9CI) (CA INDEX NAME)

10525264

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 478281-18-4 CAPLUS CN 4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-cyclohexylpropyl ester (9CI) (CA INDEX NAME)

RN 478281-21-9 OAPLUS
CN 4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-pyenylpropyl ester (9CI) (CA INDEX NAME)

O CN | CN | C NH-CH₂-O-CH₂-Ph

RN 478281-25-3 CAPLUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1(cyclohexylmethyl)-2-oxoethyl ester (SCI) (CA INDEX NAME)

CH2-CH2-O-CH2-Ph

RN 478261-28-6 'CAPLUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-Z-(phenylmethoxy)ethyl]amino]-2oxo-1-(phenylmethyl)ethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
[(3,4-dichlorophenyl)methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 478281-43-5 CAPLUS
CN 4-Morpholinecarbowylic pold, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1-cyclohexyl-2-oxoethyl_aster [9CI) (CA INDEX NAME)

C NH- CH2-0- CH2-Ph

RN 478281-46-8 CAPLUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1(2-naphthalenylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

Ph-CH2-O-CH2-CH-NH-C
CH2-CH-O-C-N

RN 478281-49-1/CAPLUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1[[docahydro-2-naphthalenyl]methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

[(4,4-dimethylcyclohexyl)methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

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L3 ANSWER 2 OF 5 CAPLUS CONYRIGHT 2007 ACS on STN (Continued)

RN 47820-31-1 CAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1[(1-methylcyclohexyl)methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

CH2-CH0-CH2-Ph

RN 479281-34-4 CAPLUS
CN 4-Morpholinecarboxylic acid, 1-{{[1-cyano-2-(phenylmethoxy)ethyl]amino}carboxyl]-3,3-dimethylbutylester (9CI) (CA INDEX NAME)

CH-CH₂-O-CH₂-Ph

RN 478291-37-7 CAPLUS
CN 4-Morpholinecarboxylic acid. 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-methyl-3-butenylester (9CI) (CA INDEX NAME)

RN 478281-40-2 CAPLUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1-,

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 478281-95-9 CAPLUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1[(4,8-dimethylspiro[2.5]oct-6-yl)methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Ph-CH₂-0-CH₂-CH-NH-C

RN 478281-58-2 CAPLUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1[(2,2-dimethylcyclohexyl)methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 478281-61-7 CAPLUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-2oxo-1-[(3,3,5,5-tetramethylcyclohexyl)methyl]ethyl ester (9CI) (CA INDEX
NAME)

Me Me CH2-CH-O-CH2-Ph

CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1[(2,3-dihydro-1H-inden-1-yl)methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

CH2-CH-CH2-O-CH2-Ph

RN 478281-67-3 CAPLUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano---(phenylmethoxy)ethyl]amino]-1[(2,3-dihydro-1H-inden-2-yl)methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 478281-70-8 CAPLUS
CM 4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-(methylsulfonyl)gropyl ester (9CI) (CA INDEX NAME)

C-NH-CH-CH₂-C-CH₂-Ph

RN 478281-73-1 CMPLUS CN 4-Morpholinecytoxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1-(1-naphthalen/lmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN C-NH-CH-CH2-O-CH2-Ph C-O-CH-CH2-CH2-SMe

RN 478281-85-5 CAPLUS
CN 4-Morpholinecarboxylic acid, 7[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-2-methylbutyl ester 9CI) (CA INDEX NAME)

RN 478281-88-8 CAPLUS
CN 2(IH)-Isoquinolinecarboxylic field, 3,4-dihydro-, 2-[[1-cyano-2-(phenylmethoxy)ethyl]aminol 1-(2,2-dimethylcyclopropyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

NH-CH-CH₂-O-CH₂-Ph

RN 478281-89-9 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1-cyclopropyl-2-oxoethyl ester (9CI) (CA INDEX NAME)

(phenyimethoxy)ethyl amino -2-oxoethyl ester (9C1) (CA INDEX NAME)

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RN 478281-76-4 CAPLUS
CN 4-Morpholinecarboxylic acid, 1-([1,1'_biphenyl]-4-ylmethyl)-2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-2-oxoephyl ester (9CI) (CA INDEX NAME)

Ph CH2-CH- CH2-CH2-Ph

RN 478281-79-7 CAPIUS
CN 4-Morpholinecarboxylic acid, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1[(4-methoxyphenyl)methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

MeO CH₂ CH₂ O-CH₂-Ph

RN 478281-82/2 CAPLUS
CN 4-Morpholinecarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-(methylthio)propyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

C-O-CH₂-C-NH-CH-CH₂-O-CH₂-Ph

RN 478281-91-3 CAPLUS
CN 2(1R)-Isoquinolinecarboxylic acid, 7,4-dihydro-, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-1-methyl-2-oxoethyl ester (9CI) (CA INDEX NAME)

0 CN

RN 478281-92-4 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]propyl ester (9CI) (CA INDEX NAME)

N C-0-CH-Et CH2-0-CH2-Ph

RN 478281-93-5 CAPLUS
CN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-, 1-{{{1-cyano-2-(phenylmethoxy)ethyl]amimp]carbonyl]butyl ester (9CI) (CA INDEX NAME)

O CH-Pr-n C-NH-CH-CH2-O-CH2-Ph

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:946262 CAPLUS
DOCUMENT NUMBER: 138:24946
Preparation of amide compounds and compositions as selective cathepsin S inhibitors
Graupe, Michael; Li, Jiayao, Link, John O.; Zipfel, Sheila; Timm, Andreas P.; Aldous, David J.;
Thurairatnam, Sukanthini
AMYS Pharmaceuticals, Inc., USA; Aventis Pharmaceuticals Inc.
PCT Int. Appl., 196 pp.
CODENT TYPE: Patent

Patent English 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.					KIND DATE				APPL	DATE							
WO	WO 2002098850 WO 2002098850				A2 20021212				WO 2		20020603						
WO																	
	W:	ΑE,															
								DM,									
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	ΧR,	ΚZ,	LC,	LK,	LF
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW.	MX,	MZ,	NO,	NZ,	OM,	PH
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ
		UA,	UG,	US,	UZ,	٧N,	YU,	ZA,	ZM,	ZΨ							
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	5Z,	TZ,	UG,	ZM,	ZW.	AM,	AZ,	BY
								AT,									
								PT,									
								SN,									
CA	2448	418			A1		2002	1212		CA 2	002-	2448	418		2	0020	603
EP	1397	340			A2		2004	0317		EP 2	002-	7346	40		2	0020	603
	R:	AT,	BE,	CH,	DE,	DX,	E5,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
CN	1512	983			A		2004	0714		CN 2	002-	8111	52		2	0020	603
BR	2002	0109	12		A		2004	0831		BR 2	002-	1091	2		2	0020	603
JP	2004	5354	22		T		2004	1125		JP 2	003~	5018	40		2	0020	603
ZA	2003	0109 5354 0083	92		Α		2005	0128		ZA 2	003-	8392			2	0031	028
US	2004	1429	99		A1		2004	0722		US 2	003~	7190	80		2	0031	121
IN	2003	CN01	887		Α		2006	0106		IN 2	003-	CN18	87		2	0031	201
PRIORIT'	Y APP	LN.	INFO	. :												0010	
										WO 2	002-	US17	411	1	W 2	0020	603
OTHER S	DURCE	(S):			MAR	PAT	138:	24946	5								
GI																	

ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

477938-71-9 CAPLUS
4-Morpholinecarboxylic acid, (1R)-2-[(cyanomethyl)amino]-1-[[[2-(difluoromethoxy)phenyl]methyl]sulfonyl]methyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

477938-85-5 CAPLUS
1-Pyrrolidinecarboxylic acid, (15)-2-[(cyanomethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

477938-86-6 CAPLUS
4-Morpholinecarboxylic acid, (1S)-2-{(cyanomethyl)amino}-1-(cyclohexylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The invention relates to compds. R3C(X2)(X7)CO-X1 [X1 = NHC(R1)(R2)X3 or NHX4; X2 = H, F, OH, OR4, NHR15, or NR17R18; X7 = H or X2 = X7 = F; R3 = alkyl or CR62X6; X3 = cyano, CR7R8R16, CR6(OR6)2, CH2COR16, CHCHSO2R5, COCP2CONR52, COCONR5R6, COCC2R5, CCCH2OR5, COCH2NR6502R5, or COCOR5; where R5 is H or (un)substituted alkyl; R6 is H, OH or NR5R6 is a ring; R7 is H, alkyl; and R8 is OH or CR7R8 are oxo; R16 is H, X4, CF3, NR6OR6, etc.; X4 comprises a heteromono or -bicyclic ring; R1 = H, alkyl; R2 = H, cyano; R2 = H, cyano, -X5-NR122, -X5-NR12COR12, etc., where X5 is a bond or alkylene and R12 is H, alkyl; n chaloalkyl; or CR1R2 may form a ring; R4 = alkylene-NR122; alkylene-NR122, alkylene-NR122; alkylene-NR122; alkylene-NR122; alkylene-NR122; alkylene-NR122; alkylene-NR12; al

(Uses) (preparation of amide compds. and compns. as selective cathepsin S inhibitors) 477938-42-4 CAPLUS (Cyclohexangeropanamide, N=(cyenomethyl)-a-(phenylmethoxy)- (9CI) (CA INDEX NAME) Ph-CH2-0 477938-46-8 CAPLUS

([(phenylmethyl)sulfonyl]methyl]ethyl ester (9CI) (CA INDEX NAME)

(Continued)

ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

1-Piperazinecarboxylic acid, 4-ethyl-, (15)-2-[(cyanomethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

777938-88-8 CAPLUS
1-Pyrrolidinecarboxylic acid, 2-(hydroxymethyl)-, (1S)-2[(cyanohethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl ester, (2S)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

477938-92-4 CAPLUS

1-Azetidinecarboxylic acid, (15)-2-[(cyanomethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

477938-94-6 CAPLUS 1-Piperidinecarboxylic acid, (15)-2-[(cyanomethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

477938-96-8 CAPLUS 1-Pyrrolidinecarboxylic acid, 3-hydroxy-, (15)-2-[(cyanomethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl ester, (3R)- (9CI) (CA INDEX NAME)

477938-97-9 CAPLUS 1-Pyrrolidinecarboxylic acid, 3-hydroxy-, (1S)-2-[(cyanomethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
137:232908
ITITLE:
INVENTOR(S):
PATENT ASSIGNEE(S):
PATENT ASSIGNEE(S):

Merck Frost Canada & Co., Can.; PE Corporation (NY);
AXYS Pharm. Inc.
POCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

LONG 100 PYRIGHT 2007 ACS on STN
AUGUSTA CAPLUS
137:232908
Preparation of N-cyanomethyl amides as cathepsin
cysteine protease inhibitors
Cysteine protease inh

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND APPLICATION NO. DATE US 2001-272799P WO 2002-US6533

OTHER SOURCE(S): MARPAT 137:232908

WO 2000-20165533

W 20020301

OTHER SOURCE(S): MARPAT 137:232908

The invention relates to a novel class of compds. R5-(E)n-D-XCR3R4CONMCRIRZCN [R1 = H, (halo)alkyl, or (halo)alkenyl or RIRZC is a
cycloalkyl ring optionally substituted by alkyl, hydroxyalkyl, or halogen;
R3, R4 = H, alkyl or alkenyl optionally substituted by cycloalkyl or
halogen or R3R4C is cycloalkyl, cycloalkenyl or heterocyclyl optionally
substituted by alkyl, halo, hydroxyalkyl, hydroxy, alkoxy, or keto; X =
NH. NR6, NHSO2, O, CR7R80, CR7R8, CR7R6CR7R80, S, SO2, CR7R8; SCR7R8,
CR7R8502, SO2CR7R8, CR7R8, CR7R8NR7, NR7CR7R8, where R6 = alkyl or R6 and
R4 form a 4-12 membered heterocyclyl ring system which is optionally
substituted and R7, R8 = H or alkyl; D, E = (un)substituted aryl,
heterocaryl, cycloalkyl, or heterocyclyl in = 1-2; R5 = H, alkyl, alkenyl,
alkoxy, halo, nitro, cyano, amino, aryl, heteroaryl, cycloalkyl,
heterocyclyl, CO2H, OH, alkoxy, SH, sulfonyl groups, etc.] and their

C4H9N2-p-C6H4-p-C6H4-L-Leu-NHCH2CN (C4H9N2 = 1-piperaziny1) was prepared from L-leucine, 1,4-dibromobenzene, aminoacetonitrile hydrochloride, and 4-{4-(tert-butoxycarbony1)-1-piperaziny1]phenylboronic acid (preparation

Karen Cheng

ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 477938-98-0 CAPLUS
4-Morpholinecarboxylic acid, (1S)-1-[[(cyanomethyl)amino]carbonyl]-3-cyclohexylpropyl ester (9CI) (CA INDEX NAME)

ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) given). The product was used to prep. a pharmaceutical compn. 459160-522-27 459162-33-98 459162-77-7P 459162-78-8P 459162-79-9P 459162-82-4P L3

459162-83-5P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(uses) (preparation of N-cyanomethyl amides as cathepsin cysteine protease inhibitors) (specific protease 19160-52-2 CAPLUS Fentanamide, N-(cyanomethyl)-4-methyl-2-[[4'-(1-piperazinyl)[1,1'-biphenyl]-4-yl]methoxyl- (9CI) (CA INDEX NAME)

459162-53-9 CAPLUS Pentanamide, 2-([1,1'-biphenyl]-4-ylmethoxy)-N-(cyanomethyl)-4-methyl-(9CI) (CA INDEX NAME)

459162-77-7 CAPLUS
1-Piperazinecarboxylic acid, 4-[3'-[[1-[[(cyanomethyl)amino]carbonyl]-3-methylbutoxy]methyl)[1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (9C1)(CA INDEX NAME)

459162-78-8 CAPLUS

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ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
1-Piperazinecatboxylic acid, 4-[4'-[{1-[[(cyanomethyl) amino]carbonyl]-3-methylbutoxy]methyl][1,1'-biphenyl)-4-yl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

459162-79-9 CAPLUS
1-Piperazinecarboxylic acid, 4-[2'-[[1-[[(cyanomethyl)amino]carbonyl]-3-methylbutoxy]methyl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
1994:557664 CAPLUS
121:157664
3-a-ryluracil derivatives and the use thereof for weed control
Winternitz, Paul; Zeller, Martin
Ciba-Geigy A.-G., Switz.
SOURCE: Ciba-Geigy A.-G., Switz.
PCT Int. Appl., 54 pp.
CODEN: PIXXOZ
PATENT INFORMATION:

CODEN: PIXXOZ
PATENT INFORMATION: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA'	KIND DATE					APP	LICA	DATE										

WO	9410	155			A1		1994	0511		WO.	1993	3-E	P28	02		1	9931	012
	W:	ΑU,	BB,	BG,	BR,	BY,	CA,	CZ,	FI.	HU	ı, JE	٠.	KP.	KR.	KZ.	LK.	LV.	MG.
					NZ,													
	RW:				DE.											NL.	PT.	SE.
					CG,												,	,
AU	9351							0524									9931	012
EP	6189	08			A1			1012									9931	
	R:	DE.	FR.	GB								_						
US	5380	701			Α		1995	0110		US	1993	1-1	357	68		1	9931	012
JP	0750	2758			T		1995	0323			1993						9931	
BR	9305	683			Α		1996	1203			1993						9931	
PRIORIT	Y APP	LN.	INFO	. :						СН	1992	-3	310				9921	
										WO.	1993	- F	P28	02			9931	
OTHER S	OURCE	(5):			MARP	ΑT	121:	1576										

The title 3-aryluracils I (W = aminocarbonyl group; R2 = halo, cyano, alkyl, etc.; R3 = H, F; R4 = H, halo, alkyl, etc.; R5 = alkyl, haloalkyl, etc.; R6-R9 = H, alkyl, etc.; R10, R11 = H, alkyl, alkenyl, etc.; m = 0-1)

Karen Cheng

L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

459164-65-9F
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(preparation of N-cyanomethyl amides as cathepsin cysteine protease inhibitors)
459164-65-9 CAPLUS
Pentanamide, 2-[(4-bromophenyl)methoxy]-N-(cyanomethyl)-4-methyl- (9CI)
(CA INDEX NAME)

ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) were disclosed. An example compd., 1-methyl-3-(4-morpholinyl)-3-oxopropyl 2-chloro-5-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1-pyrimidinyl]benzoate (III was prepd. Compds. I are suitable as active ingredients of herbicidal compns. for weed control. 157307-15-8P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as herbicide)
157307-15-8 CAPLUS
Benzoic acid, 2-chloro-5-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl)-, 2-[(cyanomethyl) amino]-1,1-dimethyl-2-oxoethyl ester (9CI) (CA INDEX NAME)